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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,285	05/17/2005	Guofu Zhou	NL 021174	5982
24737 7590 10/09/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER CHOW, YUK	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/535,285

Applicant(s)

ZHOU ET AL.

Examiner

Yuk C. Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/27/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “**extreme position**” and “**intermediate position**” in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending application 10/545,062.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications claim driving means of an electrophoretic display.

However, in claim 1 of instant application recites "a sub-duration to represent an energy sufficient to release particles...", in which "sub-duration" is not taught by application 10/545,062.

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to use a "small sub-duration" of instant application in replacement of a "series number of time interval" of application 10/545,062 to drive a electrophoretic display, because they both have same function: to build-up sufficient energy for moving particles for one position to the other, despite the different terminology is used.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Katase (US 2002/0005832 A1).

As to claim 1, Katase discloses a electrophoretic display panel, for displaying a picture, comprising: an electrophoretic medium (Fig. 2(2)) comprising charged particles (Fig. 2(3)); a plurality of picture elements (Fig. 2(11C)); a first and a second electrode (Fig. 2(201, 104) associated with each picture element for receiving a potential difference (Fig. 4A,4B); and drive means (Fig. 6(140A)), the charged particles being able to occupy extreme positions (Fig. 4A) near the electrodes and intermediate positions (Fig. 4B) in between the electrodes, the drive means being arranged for

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controlling the potential difference (Fig. 28(Vdij)) of each picture element to be a preset potential difference having a sequence of preset values of alternating sign and having a predetermined duration (Fig. 28), each preset value having a sub-duration (Fig. 28(Tdv) to represent an energy sufficient to release particles present in one of said extreme positions from their position but insufficient to enable particles to reach the other one of the extreme positions (see [0192]-[0193]), and subsequently to be a picture potential difference (Fig. 28(Tds)) having a value and an actual duration (Fig. 28(T2-T3)) in the range between a smallest duration (Fig. 28(T3-T4)) and a largest duration (Fig. 28(T1-T2)), for displaying the picture by bringing the particles into one of said positions, characterized in that the drive means are further arranged for controlling for each picture element of at least a number of the picture elements having smaller durations of the picture potential (Fig. 28(Vdij)) differences than the largest duration, the preset potential difference (Fig. 28(Vdsij) to have an additional duration, which is chosen in a range from larger than zero to equal to a difference between the largest duration and the actual duration of the picture potential difference (see Fig. 28, Vdsij is larger than zero, and it is between +V100 and Vcom).

As to claim 2, Katase discloses a display panel as claimed in claim 1 characterized in that the drive means are further arranged for controlling the respective additional duration to be a decreasing function (Fig. 19(Vd2)) of the respective actual duration of the picture potential difference (Fig. 19 shows that subsequence duration V2 has decreasing potential).

As to claim 3, Katase discloses a display panel as claimed in claim 2 characterized in that the drive means are further arranged for controlling the respective additional duration to be substantially equal to the difference between the largest duration of the picture potential differences and the respective actual duration of the picture potential difference (Fig. 19, $V_4 = V_5$).

As to claim 4, Katase discloses a display panel as claimed in claim 1 characterized in that the drive means are further arranged for controlling the preset values in the sequence to be subsequently of opposite value (Fig. 32 (Xj)).

As to claim 5, Katase discloses a display panel as claimed in claim 4 characterized in that the drive means are further arranged for generating an even number of preset values (Fig. 17(331B), second filed memory is responsible even field data, there's always be even number of field data, in order to compare, see [0147]).

As to claim 6, Katase discloses a display panel as claimed in claim 1 characterized in that the picture elements are interconnected in two or more groups whereby preset potential differences having a different polarity (Fig. 12(Yj+1) are supplied to different groups (Fig. 14).

As to claim 7, Katase discloses a display panel as claimed in claim 1 characterized in that for each picture element the first electrode comprises a data electrode (Fig. 3(X1)) and the second electrode comprises a selection electrode and the drive means further comprise first sub drive means (Fig. 24(U1-Un)) for applying a selection potential (Fig. 25(Dci)) to the selection electrode and second sub drive (Fig. 23(145)) means for applying a data potential (Fig. 23(X1-Xn)) to the data electrode.

As to claim 8, Katase discloses a display panel as claimed in claim 1 characterized in that the first electrode of each picture element is being coupled to a data electrode via a switching element (Fig. 23(SW1)), the switching element being controlled by a selection electrode, and the drive means further comprise first sub drive means (Fig. 24(U1-Un)) for applying selection potentials to the selection electrodes and second sub drive means (Fig. 23(145)) for applying data potentials to the data electrodes.

As to claim 9, Katase discloses a display panel as claimed in claim 7 characterized in that the selection electrodes or the data electrodes or both associated with picture elements are interconnected in two groups (Fig. 23(Da1-Dan) and (Db1-Dbn)), and the drive means are further arranged for generating a first preset potential difference (Fig. 25(Ds)) having a first polarity to the first group and a second preset potential difference (Fig. 25(Db)) having a second polarity opposite to the first polarity to the second group.

As to claim 10, Katase discloses a display panel as claimed in claim 1, characterized in that each picture element having a duration (Fig. 28(Tds)) of the actual picture potential difference (Fig. 28(Vdsij)) smaller than the largest duration (Fig. 28(Tdv)) of the picture potential differences (Fig. 28(Vdij)), is one of the number of the picture elements.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuk C. Chow whose telephone number is 571 270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YC
08/22/2007


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SUPERVISORY PATENT EXAMINER